Castlemaine Naturalist

April 2023

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Monthly newsletter of the Castlemaine Field Naturalists Club Inc.



Imperial Jezebel Pupae Photo: Mez Woodward

March Meeting Report: Speaker, John Lewis

"The Southern Australian Marine Flora – Diversity and Change"

Following the club's AGM, CFNC member and expert marine biologist, John Lewis

took us on a journey through the shallows to the deep ocean to explore the wonderful marine flora of Southern Australia. John's fascination with all things marine began with family summer holidays at Point Lonsdale where he enjoyed peering into the rock pools to see the many different plants and creatures. However, his direction into formal marine biology studies at the University of Melbourne resulted from a serendipitous choice of subjects and inspirational lecturers such as the botanist Sophie Ducker, an expert on marine algae and seagrasses.

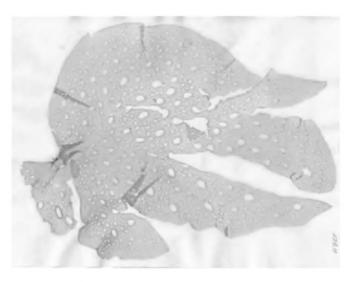


Rockpool garden at Point Lonsdale. Photo: John Lewis

Regarded as smelly, brown, rotting seaweed on the beach by many, John was able to show us the beauty and amazing diversity of these benthic algal species (as seaweeds are properly termed). He brought a collection of pressed specimens to show us the many different plant forms, each a work of art (see John's photos below)! He explained that the marine macroflora, i.e. those organisms visible to the naked eye, comprises three major groups of algae (reds/Rhodophyta, browns/Ochrophyta and greens/Chlorophyta), together with the seagrasses (vascular flowering plants). In southern Australia, where macroalgal biodiversity is among the highest in the world, the red algae are the most numerous, with more than 300 genera and 800 species, followed by the brown algae (~90 genera, 200 species), then the greens (~40 genera, 120+ species).







Algae Kallymenia cribrogloea

Evolutionarily, the red algae are the oldest and the greens the most recent. Due to their different pigments, they occupy different habitat niches, the reds having adapted to low light and therefore being found in the deeper ocean or under rock shelves and other plants. Variations are also found in the structure of the algae, ranging from a unicellular/multinucleate plant to complex forms. Life histories also vary, including some groups with large isomorphic sporophyte and gametophyte stages, others with heteromorphic sporophytes and gametophytes, or with life histories more analogous to angiosperms.

From early in his career, John's attention was drawn to introduced marine species. His honours year in marine botany focussed on a red algae, *Grateloupia filicina*, thought then to be native but more recently found to be an introduction from Japan and, for his Masters project, he used his scuba diving skills to study the algal ecology of the old Gellibrand lighthouse off Williamstown. Marine species can rapidly spread around the world in ship's ballast water and on the underside of vessels. John spent many years with the Defence Science & Technology Organisation studying methods to prevent marine growth on ship hulls (termed biofouling), without the use of highly toxic biocides, and the role of shipping and other vectors in spreading marine species. He now runs a private consultancy providing biofouling management advice and marine pest inspections.

John described several notable invasions of our waters in Port Phillip Bay, including the Northern Pacific seastar (*Asterias amurensis*), Japanese kelp (*Undaria pinnatifida*) and dead man's fingers (the green alga *Codium fragile subsp. fragile*). It was feared that these species would outcompete and displace our native species but, like many terrestrial weeds, they appear to establish in response to environmental disturbance. A healthy marine flora can be considered to form a "living sea wall", not only giving protection to the shoreline and habitat for fish and other marine species, but also forming a barrier to invasive species. Sadly, over the past decade, the once magnificent giant kelp forests on our southern shores have been in decline and, both in Port Phillip Bay and down the east coast of Tasmania, populations of native sea urchins have exploded, denuding rocky reefs of kelp cover and creating urchin "barrens". This may, in part, be attributable to excessive nutrient run-off, but John emphasised that the most profound impact was from climate change and our warming seas.

Thank you, John, for your passionate presentation, opening our eyes to our spectacular and important marine flora and the need for constant vigilance to protect its diversity and ecosystems.

Jenny Rolland

Ed. A recent article in "The Conversation" further draws our attention to the climate change-induced crisis across our Great Southern Reef:

https://theconversation.com/the-great-southern-reef-is-in-more-trouble-than-the-great-barrier-reef-201235

Tullaroop Reservoir - March Excursion report

The last CFNC excursion to Tullaroop Reservoir was in March 2021 on a wet day, so the fine weather for this year's visit, March 11th, was welcome. However, the reservoir was very full, no more than a metre below the spillway level. The usual shoreline vegetation was under water and the peninsula where the early Rodborough Vale school was sited had become an island (see photo, next page).

Sixteen members enjoyed a successful bird watching afternoon, recording 31 species and over 100 birds. Notable were a Black Falcon, a group of Black-tailed Native Hens and Rainbow Bee-eaters, but the many Great Crested Grebes seen in 2021 were absent. As we supped our afternoon tea, a Black Kite came swooping low overhead.

The report on the previous excursion (*Castlemaine Naturalist, April 2021*) included some details of the history of the Rodborough Vale property established by the Bucknall family in 1844 and of the Tullaroop Creek catchment and the Reservoir. Further details can be found here:

http://www.bucknall.org.au/resources/A-Tour-of-Rodborough-Vale-Booklet-V4-Edition-2.pdf

http://vro.agriculture.vic.gov.au/dpi/vro/nthcenregn.nsf/0d08cd6930912d1e4a2567d 2002579cb/ceb584de29bd139eca25752800055d62/\$FILE/Tullaroop.pdf

Peter Turner

Tullaroop Bird List Sat 11th March 2023

Australian Ibis	Masked Lapwing
Australian Magpie	Musk Duck
Black Falcon	Noisy Miner
Black Kite	Pacific Black Duck
Black Swan	Pacific Heron
Black-chinned Honeyeater	Rainbow Bee-eater
Black-faced Cuckoo-shrike	Red Wattlebird
Black-tailed Native Hen	Red-rumped Parrot
Brown Treecreeper	Silver Gull
Eastern Rosella	Welcome Swallow
Eurasian Coot	Whistling Kite
Fuscous Honeyeater	White-faced Heron
Gray Teal	White-plumed Honeyeater
Laughing Kookaburra	White-winged Chough
Little Raven	Willie-wagtail
Long-billed Corella	Approx. 108 individuals – Euan Moore



Grey Teal Duck (Anas gracilis) Photo: Cathrine Harboe-Ree



Tullaroop reservoir showing high water level *Photo: Jenny Rolland*



Being watched - Eurasian Coot (Fulica atra)

Photo: Cathrine Harboe-Ree



'The Watchers' Photo: Cathrine Harboe-Ree

Birds of Sutton Grange March 2023 - Nigel Harland

Australian Magpie	Long-billed Corella	Superb Fairywren
Australian Raven	New Holland	Welcome Swallow
Black-faced	Honeyeater	White-browed
Cuckooshrike	Red Wattlebird	Scrubwren
Crimson Rosella	Red-rumped Parrot	Yellow-tufted
Galah	Striated Pardalote	Honeyeater
Laughing Kookaburra	Sulphur-crested Cockatoo	

Observations

Geraldine Harris





White-browed Babblers (Pomatostomus superciliosus).



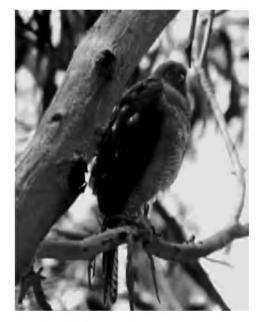
Lou Citroen asked the members present for some advice to identify this thornbill. Discussion decided the best possible identification is a juvenile Brown Thornbill.



Birds were observed dropping these hard and coarse Lerps into the birdbath to soften them.



Garden Orb-weaver



Noel Young Sparrowhawk, Happy Valley track.

Observations - (Wild Life August 1946)

George Broadway

Specimens and queries sent to the editor of "WildLife" magazine in 1946.

It was noted that many of the specimens this month were spiders, Autumn being the best season for spiders. Nearly all queries included the question "Is it dangerous?"

In reply it was pointed out that only two Australian spiders were known to be dangerous, The Redback and the Sydney Funnel-web.

SPIDERS

Bayswater: Spiny or Jewel Spider, *Gasteracantha minax*. Often found living in colonies in a tangled web. Also Croydon, Kilsyth

Kew: Garden Orb Spinner. *Epeira*. AKA Queen of the Night. Often found in the garden at this time of the year when they construct their geometrical webs to trap night-flying insects. Also Bendigo.

Pyramid Hill: Red-back spider. Considering how common they are all over Australia there have been remarkably few cases of bites from them, most occurring in country dunnies where they like to build under the seat.

Prahran: Slender *Nephila* Spider, one of the satin-back group which includes the giant golden web spiders.

West Coburg: Large Satin-back *Nephila* Spider. Web is large, strong and composed largely of golden coloured silk.

Warragul: Tan Crab Spider, noteworthy for its bright colour and coloured shield. Like a tiny coat of arms. One of the hunting spiders which does not spin a web but catches its prey by stealth. Also Greensborough

Mt Franklin: A spider like a walking "orange pip" one of the smaller members of the *Nephila* group.

Camberwell: The Long-tailed spider, not really a tail but a prolongation of the abdomen. Usually communal and soon you may expect to see small elongated egg-sacs.

Fairfield: Spider found in apple tree was the Orchard or Bird-dropping Spider, noted for its camouflage and habit of shamming dead. It is believed that it produces a scent which mimics that of a night-flying moth, and so attracts its prey

INSECTS

Cheltenham: Young caterpillar of the "Drinker Moth" or "Snout Moth". Feeds on Gum leaves and apple leaves

Malvern: Young praying mantis. The young emerge from the egg as a nymph, resembling the adults but lacking wings

Essendon: Tree Cricket, *Paragryllacris combusta,* often sent in by readers. Would often be found in wood sheds back in the days when most people had a wood fire. Also Horsham.

Horsham: Lictor casemoth cocoon recognized by the sticks of the case being arranged in a parallel fashion. The other was the Ribbed Casemoth which uses woven ribs to hold the case in shape

Report of Annual Challenge Bird Count – 2022 Chris Timewell

After several cancellations and then a late reinstatement, Chris and Kerrie Jennings completed a formal bird count at locations near Baringhup, Maldon and Newstead. In accordance with the official rules, that at least 2 people must confirm a sighting or be heard by at least 3 people, they recorded 291 individual birds from 64 species.

All results were lodged in Birdata, and also sent to the organisers to be included as the local contribution.

The 2023 Bird Count is planned for November/December.

Species Name	Bells Swamp	Baringhup- Eastville Rd	Baringhup property	Pound Ln, Newstead	Treloars Rd, Maldon
Time spent (mins)	75	2	67	40	60
Australasian Grebe				1	
Australasian Pipit			1		
Australian Magpie	6		6		
Australian Reed-Warbler			1		
Australian Shelduck	8				
Australian Wood Duck	4	15	11	3	1
Black Kite			1		
Black Swan	1				
Black-faced Cuckoo-shrike	1			1	
Brown Treecreeper			3		
Brown-headed Honeyeater					1
Buff-rumped Thornbill					1
Chestnut Teal	6				
Common Bronzewing	1				
Common Starling			6		
Crested Pigeon	1		4		
Crimson Rosella					1
Dusky Moorhen	2				
Eastern Rosella	1				1
Fairy Martin			2		
Galah	6		3		
Grey Fantail					2
Grey Shrike-thrush	1		2		3

Species Name	Bells Swamp	Baringhup- Eastville Rd	Baringhup property	Pound Ln, Newstead	Treloars Rd, Maldon
Grey Teal	4		2		
Horsfield's Bronze-Cuckoo				1	
House Sparrow			8		
Laughing Kookaburra			2		
Little Black Cormorant	2				
Little Corella			7		
Little Pied Cormorant	5				
Little Raven	5		2		1
Long-billed Corella	2		1		
Magpie-lark	5		2		1
Mistletoebird					1
Musk Lorikeet	3		2		
New Holland Honeyeater			3		1
Noisy Miner	2				
Olive-backed Oriole				2	
Pacific Black Duck	22				
Peaceful Dove			1		
Rainbow Bee-eater			6		
Red Wattlebird	2		7		1
Red-browed Finch			2		
Red-rumped Parrot	2		2		
Rufous Whistler					2
Sacred Kingfisher	2		1		
Silvereye					2
Southern Whiteface					1
Striated Pardalote					1
Sulphur-crested Cockatoo			2		
Superb Fairy-wren			5		1
Tawny Frogmouth				2	
Weebill					3
Welcome Swallow	6		2		1
Whistling Kite	2		2		
White-backed Swallow			1		
White-faced Heron	2	2			
White-plumed Honeyeater	1		4		1
White-winged Chough	4			8	6
Willie Wagtail	6				
Yellow Thornbill					1
Yellow-faced Honeyeater	1				1
Yellow-rumped Thornbill	1				1
Yellow-tufted Honeyeater				1	

Needle Grass Notes

Margaret Panter (Needle Grass Project volunteer co-ordinator)

Thanks to all who've been helping at working bees to dig out needle grass at the Castlemaine Botanical Gardens (CBG). It's been very pleasing to have some new volunteers. More are welcome! It's an opportunity to not only help the environment, but to also learn more about the grasses and other plants at the CBG Flora & Fauna

Reserve.

Six years ago the Gardens had a dense infestation of Cane Needle Grass (Nassella hyalina) as well as some Texas NG (N. leucotricha) and Chilean NG (N. neesiana). Cane NG. which is on the national Alert List for Environmental Weeds, is not common in Victoria outside of volcanic soils north and west of Melbourne. Needle grasses invade and take over not only land. but also native grasslands, of which only about 1% are left in Victoria.



Texas needle-grass, *Nassella leucotricha*Woodman St, Castlemaine. *Photo: Euan Moore*

Dozens of volunteers have greatly reduced the CBG's infestation. Over 100 volunteer hours have been spent this season marking and digging out, as well as time spent checking and organising. Council workers have also helped. But seeds can last many years in the soil and they keep germinating, so there's more work to do.

The future

I've been co-ordinating the removal of stipoid weeds (needle grasses and related grasses such as Espartillo) in Castlemaine parks and roadsides as a volunteer for many years and now I need to make time to do some of my own work which I've been neglecting due to this commitment.

To try and ensure our progress is continued, CFNC put in a budget submission in



Chilean Needle Grass, Nassella neesiana. Photo: Charles Grech

January, asking Council to provide funding for a Weeds Officer and adequate ongoing funding for council staff to remove needle grasses and other weeds. Other groups and individuals also did submissions asking for more funds for weed removal and natural environment in general.

Council does take note of the number of submissions and there will be another opportunity to express views in April or May, when Council will call for responses to its draft budget. Please consider helping in this way. Well-argued cases using the above points from individuals are important! Details

will be on the council's website at https://shape.mountalexander.vic.gov.au/draft-budget-2023-2024.

New Map - Tarnagulla

Jase Haysom of Cartography Community Mapping (CCM) has added a new map "Tarnagulla" in his excellent collection of topographical maps on the CCM site. The map is one of the West of Loddon series and covers the area north of that covered by the Nuggety Gully map. https://cartography.id.au/tarnagulla/tarnagulla.htm

COMING EVENTS

MEETING: Friday 14th April, 7.30pm, Uniting Church Fellowship Room, Lyttleton St

Speaker: Ben Kurek, "Diversity of our local huntsman spiders"

Ben is an amateur arachnologist and nature lover specialising in *Sparassidae* (Huntsman spiders) of Australia. He is a member of the Entomological Society of Victoria and is their spider specialist.

Ben is currently working on a field guide for huntsman spiders of Australia.

His talk, delivered by zoom to a live audience at the Uniting Church Hall will be on the diversity of local huntsmen, and the common ones you may find in your house, and will discuss if they're dangerous. He will also debunk any common misconceptions about them.



Photo: Ben Kurek

EXCURSION: Saturday 15th April, NOTE 10.30am start

"Autumn orchids" Leader: Cathrine Harboe-Ree

Our 15th April excursion will be a combined Castlemaine Field Naturalists Club and Australasian Native Orchid Society visit to several sites in the Maldon-Muckleford area in search of autumn orchids.

Meet: 10.30am. Instead of our usual meeting place, we will meet at in the **Downes Rd car park** adjacent to the Botanical Gardens playground. We plan to visit at least two sites, with a break for lunch and concluding at 2-2.30pm.

What to bring: Please ensure you are self-sufficient on the day by bringing your lunch, drinks, snacks, etc.

The photo shows the orchid *Corunastylis 'inland'* at the Mia Mia track. A recognised species that had not yet been formally named when photographed in 2017.



Corunastylis 'inland' Photo: Euan Moore

COMING EVENTS

MEETING: Friday 10th February, 7.30pm, Uniting Church Fellowship Room, Lyttleton St

Speaker: Georgie Custance "Monitoring Fryerstown Grevillea, a threatened species in our region"

Rescheduled from last October when floods prevented our speaker travelling here.

Learn how to look after this unique and rare plant found only in our backyard.

Georgie Custance, an ecologist from the Threatened Species Conservancy (TSC), will talk about a locally endemic plant, the Fryerstown Grevillea (*Grevillea obtecta*, see photo page 1). Although locally common in small areas, it is not widespread and is subject to threats such as inappropriate fire management. Learn how to record and monitor this species using a threatened plant monitoring app. called ProofSafe.

By mapping locations of the Fryerstown Grevillea, the TSC will be able to assess the true status of this species and develop appropriate recovery actions.

We encourage you to load the free phone app, ProofSafe, to your mobile phone or tablet before the meeting as Georgie will provide instructions on how to use it as part of her talk. For detailed instructions from the TSC on how to load and use ProofSafe, please refer to the page on the CFNC website here. Further information on the Fryerstown Grevillea project is also on our website here.

EXCURSION: Saturday 11th February, NOTE 9am start

"The *Grevillea obtecta* project and app., Fryers Ridge" Leader: Georgie Custance

Enjoy a morning walk in the bush to visit some local populations of this wonderful species as well as the many other native plants in this area. During the walk we will use ProofSafe to record Fryerstown Grevillea (Grevillea obtecta) and practice what we learnt at the Friday meeting.

We hope to see you there to learn how you can contribute to the crucial monitoring and conservation of a rare plant that is thriving in our neighbourhood.

Meet: 9.00am at the Octopus (Duke St, opposite the Castle Motel).

Bring: Water, morning tea and hat. There may be a small amount of off-track walking, so sturdy shoes and a walking stick are recommended.

If possible, please download the <u>threatened species monitoring app. ProofSafe</u> on to your phone or tablet before the walk.

The Field Trip will be cancelled in extreme weather conditions.

ROADSIDE CLEAN-UP: Monday 13 February, 9am

The first clean-up for the year along our stretch of the Pyrenees Highway

- Meet near Tait's Decorative Iron, corner of Willy Milly Rd and Pyrenees Highway.
- Garbage bags and safety vests supplied. Wear sturdy footwear and bring your own gloves and water.

Please contact Geoff Harris if you can help with the clean-up.

PROGRAM

General meetings (second Friday of each month, except January) are held in the Uniting Church Hall, Lyttleton St. except for winter months (June, July, August) when they will be held via Zoom.

If you have observations to report at the meeting and photo(s) to illustrate your report, please email them to Euan Moore by noon on the day of the meeting.

Excursions (Saturday following the general meeting) leave from the car park opposite the Castle Motel, Duke Street at 1.30pm sharp unless stated otherwise.

Fri Apr 14 Meeting 7.30pm. Speaker: Ben Kurek (Entomological Society of Victoria) "Diversity of our local huntsman spiders"

Sat Apr 15 Excursion 10.30am, Downes Rd car park adjacent to the Botanical Gardens playground. Leader: Cathrine Harboe-Ree "Autumn orchids, Maldon/Muckleford area". Combined field trip with the Australasian Native Orchid Society.

Fri May 12 Meeting 7.30pm. Speaker: Lisa Cox "Coliban Water's biodiversity program"

Sat May 13 Excursion 1.30pm. Leader: Kylie McLennan (Coliban Water), McCay Reservoir.

Fri June 9 Meeting 7.30pm (by Zoom). Speaker: Louise Saunders "Botanical art – inspiring wildlife conservation"

VISITORS ARE WELCOME AT CLUB ACTIVITIES

Castlemaine Naturalist - email newsletter material to:

newsletter.cfnc@gmail.com Deadline for the May edition: 28th April

Club website Webmaster: Ron Wescott www.castlemainefieldnaturalists.org.au

Subscriptions are now due (1st April) (Membership forms and payment details on CFNC website)

Ordinary membership: Single \$35, Family \$50 Pensioner or student: Single \$25, Family \$30

Subscription includes the monthly newsletter, 'Castlemaine Naturalist'.

Committee

President: Peter Turner
Vice-President: Euan Moore
Secretary: Jenny Rolland
Treasurer: Geoff Harris

Newsletter Editors: Noel Young, Jenny Rolland, Jill Williams

Committee: George Broadway

Cathrine Harboe-Ree

Judith Nimmo Jill Williams

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